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Sequence Listing was accepted.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: markspencer

Timestamp: Tue Sep 11 13:58:30 EDT 2007

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Application No: 10561022 Version No: 1.0

**Input Set:**

**Output Set:**

**Started:** 2007-08-21 08:07:02.840  
**Finished:** 2007-08-21 08:07:05.942  
**Elapsed:** 0 hr(s) 0 min(s) 3 sec(s) 102 ms  
**Total Warnings:** 25  
**Total Errors:** 4  
**No. of SeqIDs Defined:** 33  
**Actual SeqID Count:** 33

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E 201	Mandatory field data missing in <223> in SEQ ID (1)
E 201	Mandatory field data missing in <223> in SEQ ID (3)
E 201	Mandatory field data missing in <223> in SEQ ID (5)
E 201	Mandatory field data missing in <223> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
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W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
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Error code	Error Description
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W 213	Artificial or Unknown found in <213> in SEQ ID (27)
W 213	Artificial or Unknown found in <213> in SEQ ID (28) This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

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Shimosato, Takeshi  
Kitazawa, Haruki

<120> Utilization of Cell Forcibly Expressing Toll-Like Receptor

<130> SPO-124

<140> 10561022

<141> 2007-08-21

<150> PCT/JP2004/002920

<151> 2004-03-05

<150> JP 2003-172132

<151> 2003-06-17

<160> 33

<170> PatentIn version 3.1

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Gly Pro Arg Cys Thr Leu His Pro Leu Ser Leu Leu Val Gln Val Thr  
5 10 15

gcg ctg gct gcg act ctg gcc cag ggc agg ctg cct gcc ttc ctg ccc 153  
Ala Leu Ala Ala Thr Leu Ala Gln Gly Arg Leu Pro Ala Phe Leu Pro  
20 25 30

tgt gag ctc cag ccc cac ggc ctg gtg aac tgc aac tgg ctc ttc ctg 201  
Cys Glu Leu Gln Pro His Gly Leu Val Asn Cys Asn Trp Leu Phe Leu  
35 40 45

aag tcc gtg ccc cac ttc tcg gcg gca gcg ccc cgg gcc aac gtc acc 249  
Lys Ser Val Pro His Phe Ser Ala Ala Ala Pro Arg Ala Asn Val Thr  
50 55 60 65

agc ctc tcc tta ctc tcc aac cgc atc cac cac ttg cac gac tct gac 297  
Ser Leu Ser Leu Leu Ser Asn Arg Ile His His Leu His Asp Ser Asp

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Phe Val His Leu Ser Ser Leu Arg Thr Leu Asn Leu Lys Trp Asn Cys			
85	90	95	
ccg ccg gct ggc ctc agc ccc atg cac ttc ccc tgc cac atg acc atc			393
Pro Pro Ala Gly Leu Ser Pro Met His Phe Pro Cys His Met Thr Ile			
100	105	110	
gag ccc aac acc ttc ctg gcc gtg ccc acc ctg gag gag ctg aac ctg			441
Glu Pro Asn Thr Phe Leu Ala Val Pro Thr Leu Glu Glu Leu Asn Leu			
115	120	125	
agc tac aac agc atc acg acc gtg cct gcc ctg ccc gac tcc ctc gtg			489
Ser Tyr Asn Ser Ile Thr Thr Val Pro Ala Leu Pro Asp Ser Leu Val			
130	135	140	145
tcc ctg tcg ctg agc cgc acc aac atc ctg gtg cta gac ccc acc cac			537
Ser Leu Ser Leu Ser Arg Thr Asn Ile Leu Val Leu Asp Pro Thr His			
150	155	160	
ctc act ggc cta cat gcc ctg cgc tac ctg tac atg gat ggc aac tgc			585
Leu Thr Gly Leu His Ala Leu Arg Tyr Leu Tyr Met Asp Gly Asn Cys			
165	170	175	
tac tac aag aac ccc tgc cag ggg gcg ctg gag gtg gtg ccg ggt gcc			633
Tyr Tyr Lys Asn Pro Cys Gln Gly Ala Leu Glu Val Val Pro Gly Ala			
180	185	190	
ctc ctc ggc ctg ggc aac ctc aca cat ctc tca ctc aag tac aac aat			681
Leu Leu Gly Leu Gly Asn Leu Thr His Leu Ser Leu Lys Tyr Asn Asn			
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Leu Thr Glu Val Pro Arg Ser Leu Pro Pro Ser Leu Glu Thr Leu Leu			
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Leu Ser Tyr Asn His Ile Val Thr Leu Thr Pro Glu Asp Leu Ala Asn			
230	235	240	
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Leu Thr Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg Arg Cys			
245	250	255	
gac cat gcc cgc aac ccc tgc agg gag tgc cca aag gac cac ccc aag			873
Asp His Ala Arg Asn Pro Cys Arg Glu Cys Pro Lys Asp His Pro Lys			
260	265	270	
ctg cac tct gac acc ttc agc cac ctg agc cgc ctc gaa ggc ctg gtg			921
Leu His Ser Asp Thr Phe Ser His Leu Ser Arg Leu Glu Gly Leu Val			
275	280	285	
ttg aaa gac agt tct ctc tac aac ctg gac gcc agg tgg ttc cga ggc			969
Leu Lys Asp Ser Ser Leu Tyr Asn Leu Asp Ala Arg Trp Phe Arg Gly			
290	295	300	305

ctg gac agg ctccaa gtg ctg gac ctg agt gag aac ttc ctc tac gac Leu Asp Arg Leu Gln Val Leu Asp Leu Ser Glu Asn Phe Leu Tyr Asp 310 315 320	1017
tgc atc acc aag acc acg gcc ttc cag ggc ctg gcc cga ctg cgc aag Cys Ile Thr Lys Thr Thr Ala Phe Gln Gly Leu Ala Arg Leu Arg Lys 325 330 335	1065
ctc aac ctgtcc aat tac cac aag aag gtg tcc ttt gcc cac ctg Leu Asn Leu Ser Phe Asn Tyr His Lys Lys Val Ser Phe Ala His Leu 340 345 350	1113
cac ctg gca ccc tcc ttt ggg cac ctc cgg tcc ctg aag gag ctg gac His Leu Ala Pro Ser Phe Gly His Leu Arg Ser Leu Lys Glu Leu Asp 355 360 365	1161
atg cat ggc atc ttc ttc cgc tcg ctc agt gag acc acg ctc caa cct Met His Gly Ile Phe Phe Arg Ser Leu Ser Glu Thr Thr Leu Gln Pro 370 375 380 385	1209
ctg gtc caa ctgcct atg ctc cag acc ctg cgc ctg cag atg aac ttc Leu Val Gln Leu Pro Met Leu Gln Thr Leu Arg Leu Gln Met Asn Phe 390 395 400	1257
att aac cag gcc cag ctc agc atc ttt ggg gcc ttc cct ggc ctg ctg Ile Asn Gln Ala Gln Leu Ser Ile Phe Gly Ala Phe Pro Gly Leu Leu 405 410 415	1305
tac gtg gac cta tcg gac aac cgc atc agc gga gct gca agg cca gtg Tyr Val Asp Leu Ser Asp Asn Arg Ile Ser Gly Ala Ala Arg Pro Val 420 425 430	1353
gcc att act agg gag gtg gat ggt agg gag agg gtc tgg ctg cct tcc Ala Ile Thr Arg Glu Val Asp Gly Arg Glu Arg Val Trp Leu Pro Ser 435 440 445	1401
agg aac ctc gct cca cgt cca ctg gac act ctc cgc tca gag gac ttc Arg Asn Leu Ala Pro Arg Pro Leu Asp Thr Leu Arg Ser Glu Asp Phe 450 455 460 465	1449
atg cca aac tgc aag gcc ttc agc ttc acc ttg gac ctg tct cgg aac Met Pro Asn Cys Lys Ala Phe Ser Phe Thr Leu Asp Leu Ser Arg Asn 470 475 480	1497
aac ctg gtg aca atc cag tcg gag atg ttt gct cgc ctc tca cgc ctc Asn Leu Val Thr Ile Gln Ser Glu Met Phe Ala Arg Leu Ser Arg Leu 485 490 495	1545
gag tgc ctg cgt ctg agc cac aac agc atc tcc cag gcg gtc aat ggc Glu Cys Leu Arg Leu Ser His Asn Ser Ile Ser Gln Ala Val Asn Gly 500 505 510	1593
tct cag ttt gtg ccg ctg acc agc ctg cgg gtg ctg gac ctg tcc cac Ser Gln Phe Val Pro Leu Thr Ser Leu Arg Val Leu Asp Leu Ser His 515 520 525	1641

aac aag ctg gac ctg tat cac ggg cgc tcg ttc acg gag ctg ccg cgc			1689
Asn Lys Leu Asp Leu Tyr His Gly Arg Ser Phe Thr Glu Leu Pro Arg			
530	535	540	545
ctg gaa gca ctg gac ctc agc tac aac agc cag ccc ttt acc atg cag			1737
Leu Glu Ala Leu Asp Leu Ser Tyr Asn Ser Gln Pro Phe Thr Met Gln			
550	555	560	
ggt gtg ggc cac aac ctc agc ttc gtg gcc cag ctg ccc gcc ctg cgc			1785
Gly Val Gly His Asn Leu Ser Phe Val Ala Gln Leu Pro Ala Leu Arg			
565	570	575	
tac ctc agc ctg gcg cac aat gac atc cat agc cga gtg tcc cag cag			1833
Tyr Leu Ser Leu Ala His Asn Asp Ile His Ser Arg Val Ser Gln Gln			
580	585	590	
ctc tgt agc gcc tca ctg tgc gcc ctg gac ttt agc ggc aac gat ctg			1881
Leu Cys Ser Ala Ser Leu Cys Ala Leu Asp Phe Ser Gly Asn Asp Leu			
595	600	605	
agc cgg atg tgg gct gag gga gac ctc tat ctc cgc ttc ttc caa ggc			1929
Ser Arg Met Trp Ala Glu Gly Asp Leu Tyr Leu Arg Phe Phe Gln Gly			
610	615	620	625
cta aga agc cta gtc tgg ctg gac ctg tcc cag aac cac ctg cac acc			1977
Leu Arg Ser Leu Val Trp Leu Asp Leu Ser Gln Asn His Leu His Thr			
630	635	640	
ctc ctg cca cgt gcc ctg gac aac ctc ccc aaa agc ctg aag cat ctg			2025
Leu Leu Pro Arg Ala Leu Asp Asn Leu Pro Lys Ser Leu Lys His Leu			
645	650	655	
cat ctc cgt gac aat aac ctg gcc ttc ttc aac tgg agc agc ctg acc			2073
His Leu Arg Asp Asn Asn Leu Ala Phe Phe Asn Trp Ser Ser Leu Thr			
660	665	670	
ctc ctg ccc aag ctg gaa acc ctg gac ttg gct gga aac cag ctg aag			2121
Leu Leu Pro Lys Leu Glu Thr Leu Asp Leu Ala Gly Asn Gln Leu Lys			
675	680	685	
gcc cta agc aat ggc agc ctg cca tct ggc acc cag ctg cgg agg ctg			2169
Ala Leu Ser Asn Gly Ser Leu Pro Ser Gly Thr Gln Leu Arg Arg Leu			
690	695	700	705
gac ctc agt ggc aac agc atc ggc ttt gtg aac cct ggc ttc ttt gcc			2217
Asp Leu Ser Gly Asn Ser Ile Gly Phe Val Asn Pro Gly Phe Phe Ala			
710	715	720	
ctg gcc aag cag tta gaa gag ctc aac ctc agc gcc aat gcc ctc aag			2265
Leu Ala Lys Gln Leu Glu Leu Asn Leu Ser Ala Asn Ala Leu Lys			
725	730	735	
aca gtg gag ccc tcc tgg ttt ggc tcg atg gtg ggc aac ctg aaa gtc			2313
Thr Val Glu Pro Ser Trp Phe Gly Ser Met Val Gly Asn Leu Lys Val			
740	745	750	
cta gac gtg agc gcc aac cct ctg cac tgc gcc tgt ggg gcg acc ttc			2361

Leu Asp Val Ser Ala Asn Pro Leu His Cys Ala Cys Gly Ala Thr Phe			
755	760	765	
gtg ggc ttc ctg ctg gag gta cag gct gcc gtg cct ggg ctg ccc agc			2409
Val Gly Phe Leu Leu Glu Val Gln Ala Ala Val Pro Gly Leu Pro Ser			
770	775	780	785
cgc gtc aag tgt ggc agt ccg ggg cag ctc cag ggc cat agc atc ttt			2457
Arg Val Lys Cys Gly Ser Pro Gly Gln Leu Gln Gly His Ser Ile Phe			
790	795	800	
gcg caa gac ctg cgc ctc tgc ctg gat gag acc ctc tcg tgg aac tgt			2505
Ala Gln Asp Leu Arg Leu Cys Leu Asp Glu Thr Leu Ser Trp Asn Cys			
805	810	815	
ttt ggc atc tcg ctg ctg gcc atg gcc ctg ggc ctg gtt gtg ccc atg			2553
Phe Gly Ile Ser Leu Leu Ala Met Ala Leu Gly Leu Val Val Pro Met			
820	825	830	
ctg cac cac ctc tgc ggc tgg gac ctc tgg tac tgc ttc cac ctg tgc			2601
Leu His His Leu Cys Gly Trp Asp Leu Trp Tyr Cys Phe His Leu Cys			
835	840	845	
ctg gcc tgg ctg ccc cac cga ggg cag cgg cgg ggc gca gac gcc ctg			2649
Leu Ala Trp Leu Pro His Arg Gly Gln Arg Arg Gly Ala Asp Ala Leu			
850	855	860	865
ttc tat gat gcc ttc gtg gtc ttt gac aaa gct cag agt gct gtg gcc			2697
Phe Tyr Asp Ala Phe Val Val Phe Asp Lys Ala Gln Ser Ala Val Ala			
870	875	880	
gac tgg gtg tac aac gag ctg cgg gtg cag ctg gag gag cgc cgt ggg			2745
Asp Trp Val Tyr Asn Glu Leu Arg Val Gln Leu Glu Glu Arg Arg Gly			
885	890	895	
cgc cgc gca ctg cgc ctg tgc ctg gag gag cga gac tgg tta cct ggc			2793
Arg Arg Ala Leu Arg Leu Cys Leu Glu Glu Arg Asp Trp Leu Pro Gly			
900	905	910	
aag acg ctc ttc gag aac ctg tgg gcc tca gtc tac agc agc cgc aag			2841
Lys Thr Leu Phe Glu Asn Leu Trp Ala Ser Val Tyr Ser Ser Arg Lys			
915	920	925	
acc ctg ttt gtg ctg gcc cac acg gac cgt gtc agc ggc ctc ttg cgt			2889
Thr Leu Phe Val Leu Ala His Thr Asp Arg Val Ser Gly Leu Leu Arg			
930	935	940	945
gcc agt ttc ctg ctg gcc cag cag cgc ctg ctg gag gac cgc aag gac			2937
Ala Ser Phe Leu Leu Ala Gln Gln Arg Leu Leu Glu Asp Arg Lys Asp			
950	955	960	
gtt gta gtg ctg gtg atc ctg cgc ccc gat gcc tac cgc tcc cgc tac			2985
Val Val Val Leu Val Ile Leu Arg Pro Asp Ala Tyr Arg Ser Arg Tyr			
965	970	975	
gtg cgg ctg cgc cag cgc ctc tgc cgc cag agt gtc ctc ctc tgg ccc			3033
Val Arg Leu Arg Gln Arg Leu Cys Arg Gln Ser Val Leu Leu Trp Pro			

980

985

990

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 995 1000 1005

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 1010 1015 1020

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 Gly Pro Thr Thr Ala Glu  
 1025 1030

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Pro Cys Glu Leu Gln Pro His Gly Leu Val Asn Cys Asn Trp Leu Phe  
 35 40 45

Leu Lys Ser Val Pro His Phe Ser Ala Ala Pro Arg Ala Asn Val  
 50 55 60

Thr Ser Leu Ser Leu Leu Ser Asn Arg Ile His His Leu His Asp Ser  
 65 70 75 80

Asp Phe Val His Leu Ser Ser Leu Arg Thr Leu Asn Leu Lys Trp Asn  
 85 90 95

Cys Pro Pro Ala Gly Leu Ser Pro Met His Phe Pro Cys His Met Thr  
 100 105 110

Ile Glu Pro Asn Thr Phe Leu Ala Val Pro Thr Leu Glu Glu Leu Asn  
 115 120 125

Leu Ser Tyr Asn Ser Ile Thr Thr Val Pro Ala Leu Pro Asp Ser Leu  
 130 135 140

Val Ser Leu Ser Leu Ser Arg Thr Asn Ile Leu Val Leu Asp Pro Thr  
 145 150 155 160

His Leu Thr Gly Leu His Ala Leu Arg Tyr Leu Tyr Met Asp Gly Asn  
165 170 175

Cys Tyr Tyr Lys Asn Pro Cys Gln Gly Ala Leu Glu Val Val Pro Gly  
180 185 190

Ala Leu Leu Gly Leu Gly Asn Leu Thr His Leu Ser Leu Lys Tyr Asn  
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Asn Leu Thr Glu Val Pro Arg Ser Leu Pro Pro Ser Leu Glu Thr Leu  
210 215 220

Leu Leu Ser Tyr Asn His Ile Val Thr Leu Thr Pro Glu Asp Leu Ala  
225 230 235 240

Asn Leu Thr Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg Arg  
245 250 255

Cys Asp His Ala Arg Asn Pro Cys Arg Glu Cys Pro Lys Asp His Pro